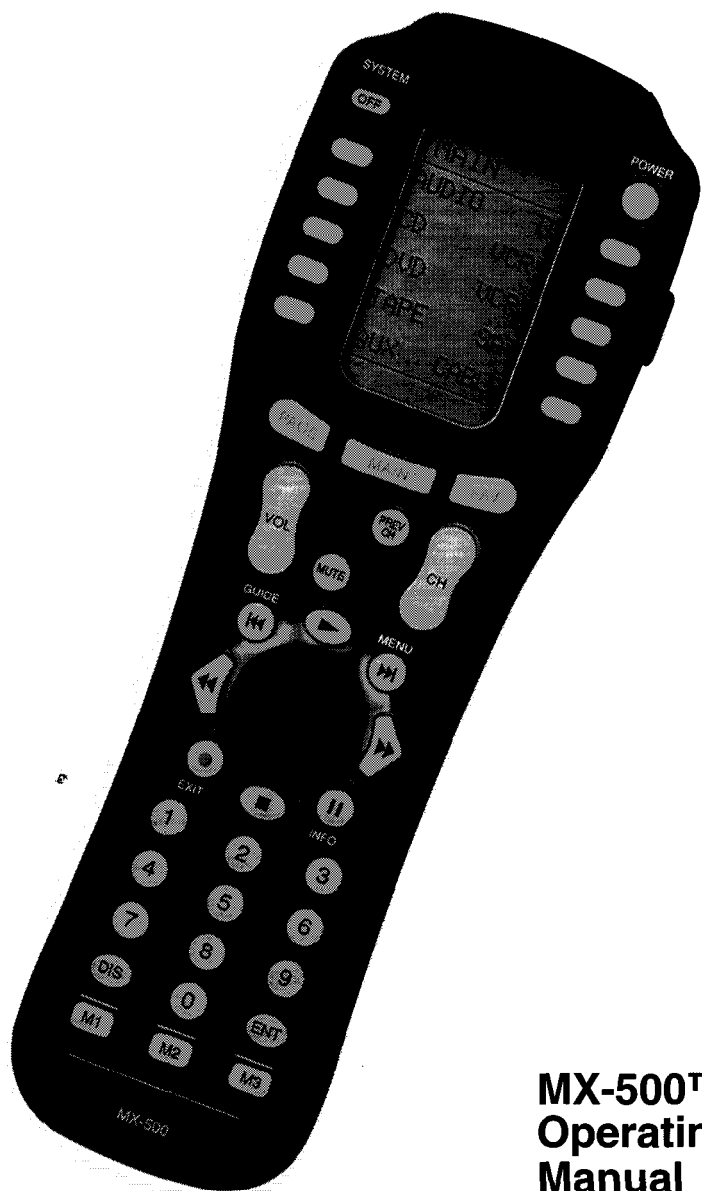


Home Theater Master® LCD Screen Preprogrammed and Learning Remote Control



**MX-500™
Operating
Manual**

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1. Introduction

Congratulations! You have purchased one of the most sophisticated remote control on the market. The MX-500™ has been designed to provide a new standard in remote control and infrared technology offering a very powerful and flexible preprogrammed, learning, menu-driven product.

With the MX-500™ you have the option of programming the unit for up to ten home entertainment and home automation components by using either the preprogrammed code library in the remote control, by teaching up to 530 commands into MX-500™ from your original remote controls, or a combination of both methods.

The MX-500™ has many additional operating features to add convenience and enjoyment to the operation of your home entertainment system including the ability to create your own descriptions of the component buttons on the LCD, the ability to learn 530 commands from your original remote controls, various macro operations program, 50 favorite channels buttons, and punch-through operations for volume control, channel and transport buttons.

Setting up the MX-500™ to operate your components is easy and simple. Please follow the instructions in the manual and retain the manual for future reference. In the event the manual is lost or misplaced, a replacement copy can be found at the Home Theater Master website: <http://www.hometheatermaster.com>

For any questions or comments about the MX-500™, please contact us at Universal Remote Control, Inc., 500 Mamaroneck Avenue, Harrison, NY 10528 at 914-835-4484 or e-mail us: service@urcmx.com Regular customer service hours are 9:00 AM to 6:00 PM EST, Monday – Friday.

2. Batteries

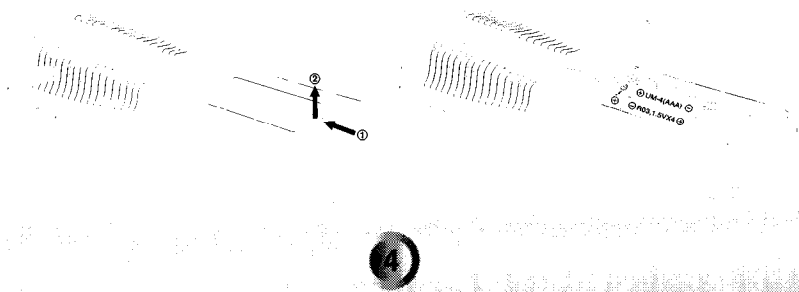
A. Battery Installation

Before the remote control can be used, the supplied batteries need to be installed. First, unsnap the battery cover on the back of the unit and install the four AAA batteries inside the battery compartment as shown. Make sure the batteries line up with the (+) and (-) markings. Improper installation could damage the remote control. When you're done, slide the battery cover back on. The remote control starts up automatically and the default device components will appear on the LCD.

B. Battery Life

Under normal operating conditions, the batteries supplied with the remote control will last approximately six months. If the batteries are running low, you will notice reduced range from the remote control, commands that are not sent properly, or are not sent at all. You may also notice the backlighting of the LCD screen and the button is diminished. Should any of these occur, replace the batteries immediately. To ensure proper performance of the unit, only use new alkaline batteries.

The remote control will retain the commands and settings in its memory even after the batteries are low or become discharged. See Memory Lock on page 34. Please replace the worn batteries with a fresh set as soon as possible.



3. Summary of Operations

A. Description of Devices

The MX-500™ is designed to operate up to ten components on the market including **Audio Receivers, Cable and Satellite Boxes, TV, DVD (LD), VCR1, VCR2, CD, Tape and AUX.** However, each of the device buttons and corresponding functions can be changed to meet your individual requirements. Almost any device that uses infrared commands can be controlled by the MX-500™, including Home Automation, Personal computers and more.

Tip) The auxiliary function could be used to operate lighting controls or the second VCR could be changed to operate a second TV.

Each device button on the main screen contains two sub-pages of commands and you can change the name of any LCD button using up to five alphabet characters and numbers to customize the unit to fit your audio/video components. Please refer to the LCD Button Editing on page 28 for additional details.

B. Pre-programmed Codes

The MX-500™ comes with preprogrammed codes for practically all the major audio and video equipment on the market. You can set-up and operate all of your components with the MX-500™ simply by punching in the three-digit code number assigned to your brand of component.

The code numbers for the various brands of components

3. Summary of Operations

are listed in the back of this instruction manual. Please refer to the programming instructions shown on page 10 for details.

C. Learning From Other Remote Controls

The MX-500™ can learn codes from your original remote controls. There are 26 LCD screens in the remote control and all the functional buttons as well as ten device buttons on the main menu screen can be taught. In addition, there are 31 rubber buttons and a joystick that can be taught for each of the ten devices. As a whole, you can teach up to 530 new functions into the remote control. Please refer to page 15 in the instruction manual for details.

D. Macro Operations

The remote control is capable of sending out a series of commands with one button press. Any function available on your original remote control or in the pre-programmed database can be added to a macro button to completely automate what you would normally do by pushing buttons one at a time. It can be as simple as "Turning on your TV and Cable Box, turning the TV to the appropriate channel for operation with the Cable Box and changing the Cable Box channel to your favorite morning news channel". Or the macros can be configured to "Power On your TV, DVD player and receiver, change to the appropriate inputs and outputs, dim your lights and start the movie playing". It can be simple or as comprehensive as you want it to be.

There are two types of macro buttons you can use for macro operations:

3. Summary of Operations

M1, M2, M3, Power and System Off Buttons

Each of these five buttons are designed to send out up to 20 series of commands you program into the buttons. Each one is commonly used to turn on and turn off all of your A/V components with one button press, but can be programmed with whatever macro you desire.

Ten Device Buttons

There are ten device buttons and each of these device buttons can send out up to 20 programmed commands when pressed for more than two seconds. It is typically used in sending out audio input codes so that the audio receiver will make an automatic input switch when you press the respective device button on the remote control, but can be programmed with whatever macro you desire.

E. Favorite Channel Buttons

You can create up to 50 favorite channel buttons in the remote control by programming the most frequently watched channel numbers into these buttons. Each of these buttons can send out up to 10 commands.

Please refer to page 18 of the manual for programming the Favorite Channel Programming.

F. Punch Through Operations

The MX-500™ can be setup to operate audio component volume control buttons (VOLUME UP and DOWN and

3. Summary of Operations

MUTE) while all the other buttons control other equipment. You can also set up the remote to operate channel control and transport functions (PLAY, STOP, REWIND, FAST FORWARD, SKIP-, SKIP+, PAUSE and Record buttons) from VCR, DVD, LD, CD or any other mode while all other buttons in the remote control are controlling different components.

Please refer to page 23 in the manual for details.

G. Editing LCD Text

You can create your own text on each of the twenty-six LCD screens.

Please refer to page 28 in the manual for details.

H. Cloning the MX-500™

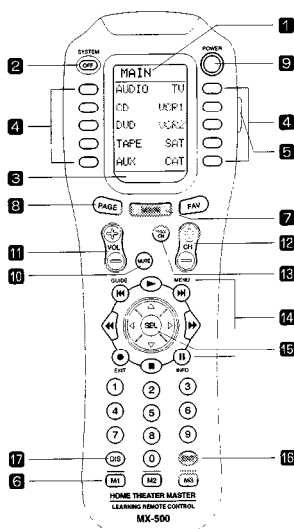
The MX-500™ is capable of sending and receiving all the programmed codes, text on the LCD and operations from one MX-500™ to another MX-500™. Please refer to page 32 in the manual for details.

I. All Other Operations

You can set the duration of the backlight on time and LCD contrast. Please refer to page 33 and 35 in the manual for details.

3. Summary of Operations

J. LCD Screen and Button Layout

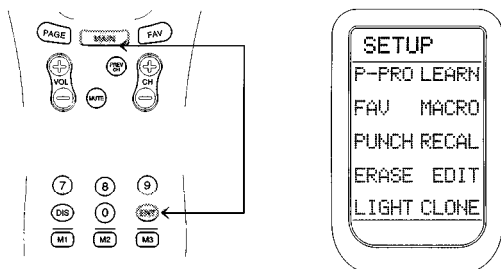


- 1** Displays the name of the device selected.
- 2** System off(Power off)
- 3** Displays page number.
- 4** Displays the device and function names.
- 5** LIGHT button.
- 6** MACRO buttons.
- 7** MAIN DEVICE menu button.
- 8** LCD Page change button.
- 9** POWER
- 10** MUTE
- 11** VOLUME
- 12** CHANNEL
- 13** Previous channel button.
- 14** TRANSPORT functions(PLAY, STOP, REWIND and FF) for VCR, CD and DVD etc.
- 15** JOYSTICK button(UP, DOWN, LEFT, RIGHT and ENTER) to move the cursor and enter the selection by pushing down the joystick.
- 16** ENTER
- 17** DISPLAY

3. Summary of Operations

K. System Settings

All programming is done by first entering the SYSTEM SETTING mode in the remote control. Press both the MAIN and ENTER buttons simultaneously for **three seconds to enter the SYSTEM SETTING mode.**



Press any of the ten buttons associated with the descriptions written on the LCD. You can exit the Set Up mode by simply pressing the MAIN button.

4. Programming MX-500™ to Control Your Components

You can program the MX-500™ to make it compatible with your components by following either the pre-programmed method instructions or by teaching it with your original remote controls.

A. Using Pre-programmed Codes

You can program the MX-500™ to make it compatible with your components by using the pre-programmed method.

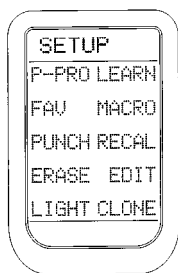
4. Programming MX-500™ to Control Your Components

1. Three-Digit Code Number

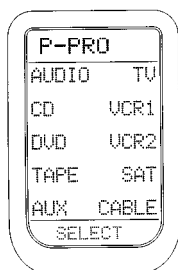
1. **Turn on** the component you wish to program.

Tip) If your component has a discrete Power ON and OFF button, please do not yurn on the component manually.

2. Go to the program setting mode by pressing both the MAIN and ENTER buttons simultaneously for three seconds.



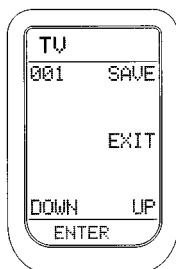
3. Select the P-PRO button next to the LCD screen.



4. Press the device you wish to program. (E.g. To program TV, press the TV button).

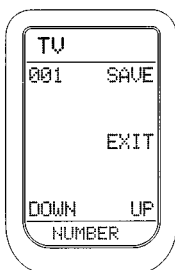
4. Programming MX-500™ to Control Your Components

5. Select the device from which the appropriate three-digit code number table will be selected.
(E.g. If it is the TV code table, press the TV device button).



6. Point the remote control toward the component and enter the three-digit code number you selected for your component from the code table provided on page 41 - 54. (Please enter the code number within 20 seconds of programming). If there is more than one code number assigned to your brand, try the one code number at a time until you find the right code number. (If you enter the right code number, the component will turn off right after you entered the correct number).

7. Confirm that it is the right code by pressing Power button. After you have confirmed that the right code is entered, save the code by pressing the **SAVE** button on LCD.



4. Programming MX-500™ to Control Your Components

8. Exit from preprogramming mode by pressing the **MAIN** button and then exit from SET UP mode by pressing the **MAIN** button once again.
9. Confirm you have entered the right code number that matches your component by pressing other functional buttons. If any of the buttons fail to operate, as they should, please repeat from Step 1.
10. Continue to program other components by repeating from Step 1 above.

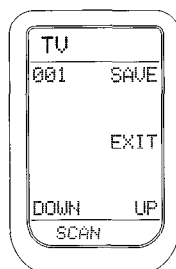
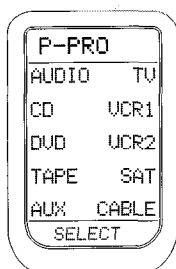
2. Auto Scan with Three Digit Number

You can also program your remote control by sending out series of Power Off commands for different brands stored in the library by using the following steps.

1. Manually turn on the component you plan to operate.

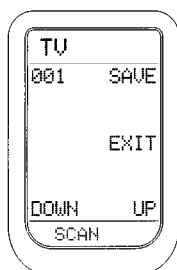
Tip) If your component has a discrete Power ON and OFF button, please do not yurn on the component manually.

2. Go to program setting mode in the remote control by pressing both the **MAIN** and **ENTER** buttons simultaneously for **three seconds**.
3. Select the **P-PRO** button next to the LCD screen.



4. Programming MX-500™ to Control Your Components

4. Press the device you wish to program.
(E.g. To program TV, press the TV button).
5. Select the device from which the scanned code table will be selected. (E.g. If it is the TV code table, press the TV device button).
6. Point the remote control toward the component and press either the **UP** or **DOWN** button on the LCD. (It will send out the series of Power codes when the button is kept pressed and the code number that are being sent are shown on the LCD). If the right code number is sent, the component will turn off right after the code number is transmitted.



7. Release the **UP** or **DOWN** button you were pressing as soon as the device is turned off.
8. Confirm that it is the right code by pressing Power button. After the confirmation that the right code is entered, save the code by pressing the **SAVE** button on the LCD. Later you may want to try other code numbers for your component to see which one includes the most functions appropriate for your device.
9. Exit from Preprogrammed mode by pressing the **MAIN** button and then exit from SET UP mode by pressing the **MAIN** button once again.

4. Programming MX-500™ to Control Your Components

10. Confirm that you entered the right code number that matches your component by pressing other functional buttons. If any of the buttons do not operate as they should, please repeat from Step 1.
11. Continue to program other components by repeating from Step 1 above.

B. Learning From Other Remote Controls

You can program the MX-500™ to operate a component by teaching the commands from your original remote control to device buttons on the main screen menu, 20 buttons on 2 pages of the LCD per device, 31 rubber buttons and the joystick located in the middle of the remote control. The MX-500™ learns these commands by receiving infrared signals directly from your existing remote controls. The MX-500™ receives these signals through its learning eye, located at the top of the unit.

Apart from the PAGE, MAIN, FAV buttons and M1 – M3 buttons which cannot be taught, the MX-500™ has the capability of learning up to 530 commands.

Tip) Commonly used function buttons include the two pages of sub-commands within each of the 10 devices, channel up and down, volume up and down, menu, guide, exit, info, 0-9 and joystick.

Points to Remember

If the remote control fails to learn a function after the first try:

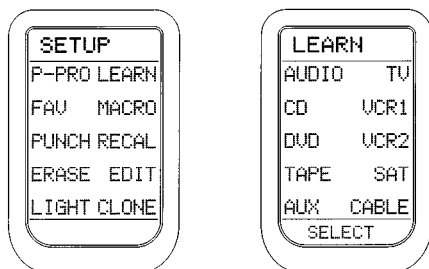
- Keep the remotes stable by placing them on a flat surface.

4. Programming MX-500™ to Control Your Components

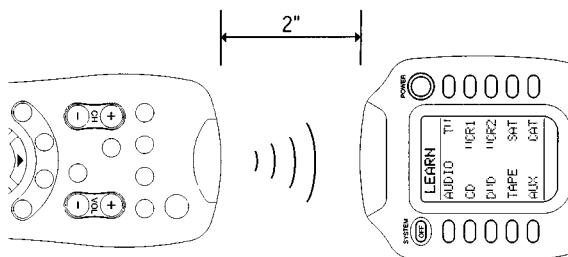
- Make sure the original remote is pointed at the learning eye at the top end of the case.
- Make sure the original remote's batteries aren't low.
- Try again. Sometimes the second or third attempt works.
- Try varying the distance between the remotes until you find an optimal distance where the codes are learned on the first or second try.

1. Programming Function Buttons

1. Go to the program setting mode by pressing both the **MAIN** and **ENTER** buttons simultaneously for three seconds.



2. Press the **LEARN** button.
3. Select the **DEVICE** you wish to program.
4. Press the button on the MX-500™ you wish to program and place your original remote control head to head with the MX-500™ about 2 inches apart on a flat surface as illustrated below.



4. Programming MX-500™ to Control Your Components

5. Press the button on your original remote control you wish to program into the MX-500™. Once the MX-500™ has received the signal, the MX-500™ will flash "Good" on the LCD screen, indicating it learned the code correctly. If it flashes "Fail", repeat from Step 4 until it learns successfully. (Please enter the code signal within 20 seconds of programming).
6. Once you complete the programming and wish to exit the learning mode, press the **MAIN** button. Exit from SET UP mode by pressing the **MAIN** button once again.

2. Programming the Ten Device Buttons

1. Go to the program setting mode by pressing both the **MAIN** and **ENTER** buttons simultaneously for three seconds.
2. Press the **LEARN** button.
3. Press the **PAGE** button.



4. Press any of the ten device buttons you wish to program into the MX-500™ and place your original remote control head to head with the MX-500™ about 2 inches apart on a flat surface.

4. Programming MX-500™ to Control Your Components

5. Press the button on your original remote control you wish to program into the MX-500™. Once the MX-500™ has received the signal, the MX-500™ will flash "Good" on the LCD screen, indicating it learned the code correctly. If it flashes "Fail", repeat from Step 4 until it learns successfully. (Please enter the code signal within 20 seconds of programming).
6. Once you complete the programming and wish to exit the learning mode, press the **MAIN** button. Exit from SET UP mode by pressing the **MAIN** button once again.

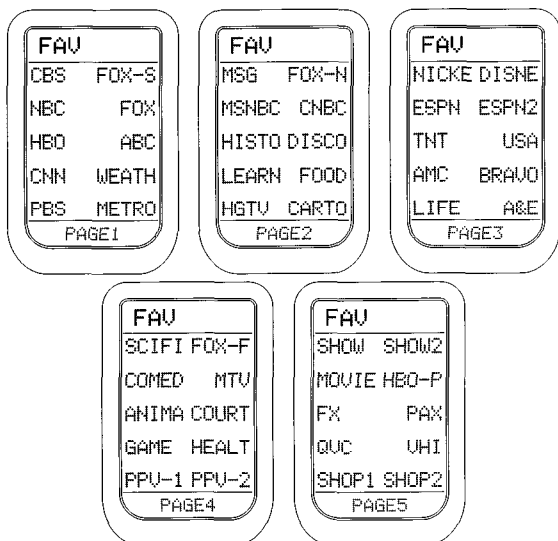
5. Programming Favorite Channels

You can create and program up to 50 Favorite Channel Buttons and each favorite channel button can send out up to 10 commands with one button press.

1. Go to the program setting mode by pressing both the **MAIN** and **ENTER** buttons simultaneously for three seconds.
2. Press the **FAV** Button on the LCD.

5. Programming Favorite Channels

3. Press the appropriate device button from which the channel number will be selected.



4. Go to one of the five **LCD** pages by pressing the FAV(or PAGE) button. Press the button you will be assigning to the favorite channel and enter the channel number, power, Display and Enter commands you wish to store in the FAVORITE channel button. You can store up to 10 commands.

Tip) If you pressed a wrong channel number, please move the cursor by using left or right button of the joystick and then prcss the correct channel number.

5. Press the favorite channel button you selected in Step 4 again to store the channel you programmed.

5. Programming Favorite Channels

6. Once you completed the programming and wish to exit from the FAVORITE CHANNEL mode, press the MAIN button. Exit from SET UP mode by pressing the MAIN button once again.

Note: There are five pages of LCD screens for favorite channel programming. You move to other pages by pressing the PAGE or FAV button.

6. Programming Macro Buttons

There are two types of macro functions you can program with the MX-500™.

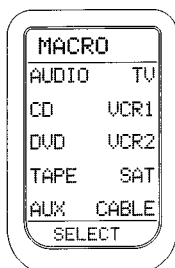
- The M1, M2 and M3, Power and System Off buttons are designed to send out up to twenty commands from each of the five hard buttons.
- The ten device buttons on the Main menu can send out up to twenty commands from each device button when the device button is pressed for more than 1 second.

A. Programming Macro Functions to M1- M3, Power and System Off Buttons:

1. Go to the programming mode by pressing the MAIN and ENTER button simultaneously for **three seconds**.

6. Programming Macro Buttons

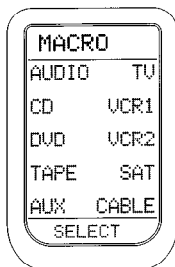
2. Press the **MACRO** button in programming mode.



3. Press one of the five-macro buttons, **M1 – M3, Power and System Off** in the programming mode.
4. Press the functional buttons you wish to store in the macro button you selected. (You can store up to 20 commands).
5. Store the commands you programmed into the macro button by pressing the **Channel Up** button.
6. Repeat from Step 3 to program other macro buttons.
7. Once you complete the programming and wish to exit from this mode, press the **MAIN** button. Exit from SET UP mode by pressing the **MAIN** button once again.

B. Programming Macro Functions to the Ten Device Buttons:

1. Enter the programming mode by pressing the **MAIN** and **ENTER** buttons simultaneously for **three seconds**.
2. Press the **MACRO** button in programming mode.



6. Programming Macro Buttons

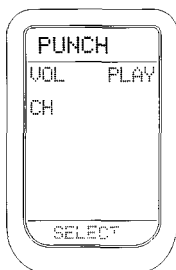
3. Press one of the ten device buttons you wish to program for macro functions.
4. Select the device by pressing device button and then press the functional buttons you wish to store in the device macro button you selected. You can store up to 20 commands into the device macro buttons.
5. Save the commands you selected to the macro button by pressing the **CH UP** button.
6. Repeat from Step 3 to program other device button. Once you complete the programming and wish to exit from this mode, press the **MAIN** button. Exit from SET UP mode by pressing the **MAIN** button once again.

Note: Pressing the PAUSE button during the macro programming will add a time delay of 0.2 seconds between the commands. E.g. Pressing the PAUSE button twice will create a pause of 0.4 seconds between the commands where the delay was inserted.

7. Programming Punch Through Functions

You can use the audio receiver volume control in a different mode (E.g. Audio receiver Volume Up and Volume Down and Mute in Satellite mode) using the volume punch through feature. You can also have channel punch through (Channel Up, Channel Down) as well as eight VCR or DVD transport buttons, Play, Stop, Fast Forward, Rewind, Skip-, Skip+, Pause and Record, to operate in another mode such as in Satellite, Cable and Audio modes.

1. Enter the programming mode by pressing the MAIN and ENTER buttons simultaneously for three seconds.
2. Press the PUNCH button in programming mode.

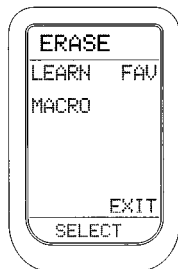


3. Press the VOL button on the LCD for Volume Punch Through, the PLAY for Transport Punch Through and the CH for Channel Punch Through.
4. Select the device you wish to punch through to (1st device e.g. Satellite receiver).
5. Select the device you wish to punch through from (2nd device e.g. Audio receiver).
6. Punch through is saved when the second device is pressed.
7. Repeat from Step 3 to program Punch Through for other devices.
8. Once you have completed the programming and wish to exit from this mode, press the MAIN button.

8. Erasing Existing Programming

A. Erasing Learned Buttons

1. Go to the program setting mode by pressing both the **MAIN** and **ENTER** buttons simultaneously for three seconds.
2. Press the **ERASE** button.



3. Press the **LEARN** button to erase learned button(s).
4. If you wish to erase all the learned functions in MX-500™, press the **ALL** button and then press the **SURE?** button at the next to the LCD screen. If you wish to erase all the buttons in a single device or an individual button in the device, press the **DEVICE** button.

*Tip) To erase the learned function in the device button itself, press the **PAGE** button and then press the device button (TV, VCR, Audio, etc.).*

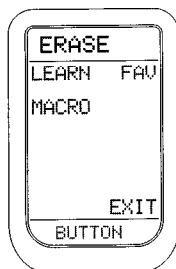
5. Press the device button (TV, VCR, Audio, etc.) to erase the button(s) from the device.
6. Press the **ALL** button if you wish to erase all the learned buttons in the device and press the **SURE?** button at the next to the LCD screen.
7. Press the **KEY** if you wish to erase individual buttons in that device one at a time. This will show all the functions in the device. Press the button you wish to erase.

8. Erasing Existing Programming

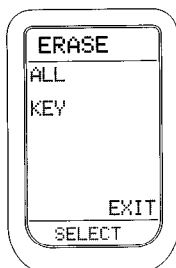
8. Press the **MAIN** button to exit to main erase mode. Press the **MAIN** button once again to exit the SET UP mode.

B. Erasing Favorite Channel Button

1. Go to the program setting mode by pressing both the **MAIN** and **ENTER** buttons simultaneously for **three seconds**.
2. Press the **ERASE** button.
3. Press the **FAV** button to erase Favorite channel button(s).



4. If you wish to erase all the favorite channel buttons in the MX-500™ press the **ALL** button and then press the **SURE?** button at the next LCD screen. If you wish to erase the each button, press the **KEY** button.
5. Press the favorite channel button you wish to erase the programmed channel number one button at a time.



8. Erasing Existing Programming

6. Press the **MAIN** button exit to main erase mode. Press the **MAIN** button once again to exit the **SETUP** mode.

C. Erasing Macro Functions

1. Erase M1- M3, Power And System Off Buttons

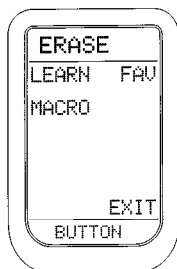
1. Go to the program setting mode by pressing both the **MAIN** and **ENTER** buttons simultaneously for three seconds.
2. Press the **ERASE** button.
3. Press the **MACRO** button to erase **MACRO** button(s).
4. If you wish to erase all the Macro buttons in the **MX-500™**, press the **ALL** button and then press the **SURE?** button at the next LCD screen. If you wish to erase a single macro button at a time, press the **KEY** button.
5. Press one of the **MACRO** button (**M1-M3**, **Power** and **System Off**) you wish to erase the macro functions.
6. Press the **MAIN** button to exit to main erase mode. Press the **MAIN** button once again to exit the **SETUP** mode.

2. Erase Macro Functions in The Ten Device Buttons

1. Enter the programming mode by pressing the **MAIN** and **ENTER** buttons simultaneously for **three** seconds.

8. Erasing Existing Programming

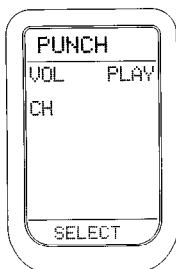
2. Press the **ERASE** button in programming mode.
Press the **MACRO** button to erase **MACRO** button(s).



3. Press the **KEY** button.
4. Press one of the ten device buttons you wish to erase macro function. Repeat this step until you erase all the Macro buttons you wish to erase.
5. Exit from Macro mode by pressing the **MAIN** button and then exit from SET UP mode by pressing the **MAIN** button once again.

D. Erasing Punch Through Functions

1. Enter the programming mode by pressing the **MAIN** and **ENTER** buttons simultaneously for **three seconds**.
2. Press the **PUNCH** button in programming mode.



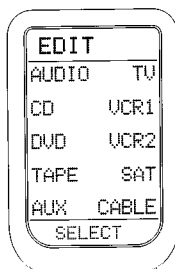
8. Erasing Existing Programming

3. Press the **VOL** button on the LCD for Volume Punch Through, the **PLAY** for Transport Punch Through and the **CH** for Channel Punch Through you wish to erase.
4. Press the **DEVICE** button you wish to erase punch through.
5. Press the same **DEVICE** button once again.
6. Punch through is erased when the same device button is pressed the second time.
7. Repeat from Step 3 to erase the Punch Through for other devices.
8. Exit from Punch Through mode by pressing the **MAIN** button and then exit from SET UP mode by pressing the **MAIN** button once again.

9. LCD Button Editing

A. To Create or Edit Text on Function and Device Buttons

1. Enter the programming mode by pressing the **MAIN** and **ENTER** buttons simultaneously for **three seconds**.
2. Press the **EDIT** button in programming mode.



9. LCD Button Editing

3. Press the device button you wish to write a text on the LCD.

*Tip) To edit the text on device button, press the **PAGE** button and then press one of the ten device buttons, you wish to edit.*

4. Press the LCD button on which you wish to create text. You can also go to the second page of LCD by pressing the **PAGE** button.

5. The character to be changed will **blink** and you can select the character using the number pad on the remote control. The characters assigned to each number pad button are shown below. It will be rotated to a different character each time the same number pad is pressed.

Tip) You can move the cursor left or right using the joystick. You can also erase a current character by pressing cursor down of the joystick.

1.	<table><tr><td>A</td><td>B</td><td>C</td><td>1</td></tr></table>	A	B	C	1	2.	<table><tr><td>D</td><td>E</td><td>F</td><td>2</td></tr></table>	D	E	F	2	3.	<table><tr><td>G</td><td>H</td><td>I</td><td>3</td></tr></table>	G	H	I	3	4.	<table><tr><td>J</td><td>K</td><td>L</td><td>4</td></tr></table>	J	K	L	4								
A	B	C	1																												
D	E	F	2																												
G	H	I	3																												
J	K	L	4																												
5.	<table><tr><td>M</td><td>N</td><td>O</td><td>5</td></tr></table>	M	N	O	5	6.	P Q R 6	7.	S T U 7	8.	<table><tr><td>V</td><td>W</td><td>X</td><td>8</td></tr></table>	V	W	X	8																
M	N	O	5																												
V	W	X	8																												
9.	<table><tr><td>Y</td><td>Z</td><td>9</td><td>blank</td></tr></table>	Y	Z	9	blank	0. <table><tr><td>0</td><td>!</td><td>▶</td><td>◀</td><td>▲</td><td>▼</td><td>■</td><td> </td><td>▶▶</td><td>◀◀</td></tr><tr><td>#</td><td>&</td><td>(</td><td>)</td><td>+</td><td>-</td><td>.</td><td>/</td><td>_</td><td>"</td></tr></table>						0	!	▶	◀	▲	▼	■		▶▶	◀◀	#	&	(	)	+	-	.	/	_	"
Y	Z	9	blank																												
0	!	▶	◀	▲	▼	■		▶▶	◀◀																						
#	&	(	)	+	-	.	/	_	"																						

6. Save the text you created by pressing the button you were writing on again(the same function button you selected in step 4).

7. Exit from Edit mode by pressing the **MAIN** button and then exit from SET UP mode by pressing the **MAIN** button once again.

9. LCD Button Editing

B. To Write a Text for Favorite Channel Buttons

1. Enter the programming mode by pressing the **MAIN** and **ENTER** buttons simultaneously for **three seconds**.
2. Press the **EDIT** button in programming mode.
3. Press the **FAV** button and then press the favorite channel button you wish to write a text. There are five LCD pages of favorite channels. Select the page you wish to write on by pressing the **FAV** or **PAGE** button.
4. The character to be changed on the button you selected will **blink** and you can select the character using the number pad button on the remote control. The characters assigned to each number pad button are shown below and it will be rotated to different character each time the same number pad button is pressed again.

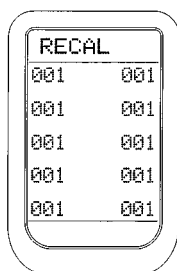
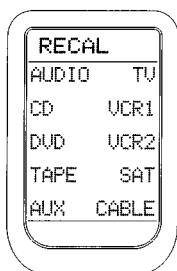
Tip) You can move the cursor left or right using the joystick. You can also erase a current character by pressing the cursor down of the joystick.

- | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|-------|-------|--|---|---|----|----|--|---|---|---|---|--|----|----|---|---|---|---|---|---|---|---|---|---|
| 1. <table border="1"><tr><td>A</td><td>B</td><td>C</td><td>1</td></tr></table> | A | B | C | 1 | 2. <table border="1"><tr><td>D</td><td>E</td><td>F</td><td>2</td></tr></table> | D | E | F | 2 | 3. <table border="1"><tr><td>G</td><td>H</td><td>I</td><td>3</td></tr></table> | G | H | I | 3 | 4. <table border="1"><tr><td>J</td><td>K</td><td>L</td><td>4</td></tr></table> | J | K | L | 4 | | | | | | | | |
| A | B | C | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| D | E | F | 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| G | H | I | 3 | | | | | | | | | | | | | | | | | | | | | | | | |
| J | K | L | 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. <table border="1"><tr><td>M</td><td>N</td><td>O</td><td>5</td></tr></table> | M | N | O | 5 | 6. <table border="1"><tr><td>P</td><td>Q</td><td>R</td><td>6</td></tr></table> | P | Q | R | 6 | 7. <table border="1"><tr><td>S</td><td>T</td><td>U</td><td>7</td></tr></table> | S | T | U | 7 | 8. <table border="1"><tr><td>V</td><td>W</td><td>X</td><td>8</td></tr></table> | V | W | X | 8 | | | | | | | | |
| M | N | O | 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| P | Q | R | 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| S | T | U | 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| V | W | X | 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9. <table border="1"><tr><td>Y</td><td>Z</td><td>9</td><td>blank</td></tr></table> | Y | Z | 9 | blank | 0. <table border="1"><tr><td>0</td><td>!</td><td>▶</td><td>◀</td><td>▲</td><td>▼</td><td>■</td><td> </td><td>▶▶</td><td>◀◀</td></tr><tr><td>#</td><td>&</td><td>(</td><td>)</td><td>+</td><td>-</td><td>.</td><td>/</td><td>_</td><td>"</td></tr></table> | | | 0 | ! | ▶ | ◀ | ▲ | ▼ | ■ | | ▶▶ | ◀◀ | # | & | (|) | + | - | . | / | _ | " |
| Y | Z | 9 | blank | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | ! | ▶ | ◀ | ▲ | ▼ | ■ | | ▶▶ | ◀◀ | | | | | | | | | | | | | | | | | | |
| # | & | (|) | + | - | . | / | _ | " | | | | | | | | | | | | | | | | | | |

5. Save the text you completed by pressing the same favorite channel button you selected in Step 3 again.
6. Exit from Edit mode by pressing the **MAIN** button and then exit from SET UP mode by pressing the **MAIN** button once again.

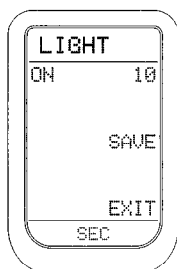
10. Recalling the Preprogrammed Three-Digit Number

1. Go to the programming mode by pressing the **MAIN** and **ENTER** button simultaneously for **three seconds**.
2. Press the **RECAL** button in programming mode.
3. The LCD display will alternately flash device names and the three-digit code number assigned to the device for 10 seconds and then exit to main mode.



11. Setting Back Light

1. Go to the programming mode by pressing the **MAIN** and **ENTER** button simultaneously for **three seconds**.
2. Press the **LIGHT** button in programming mode.



3. Using the number pad button, enter the desired back light time (in seconds). It can go up to 99 seconds. Enter the time by pressing the **SAVE** button on the LCD.

11. Setting Back Light

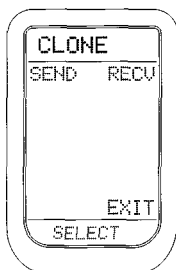
Tip) Pressing ON button will change it to OFF eliminating the back light. Pressing the same button again will restore the back light.

4. Exit from the Set Up mode by pressing the **MAIN** button.

Tip) To turn off the back light manually, press the light button while the back light is on.

12. Cloning MX-500™

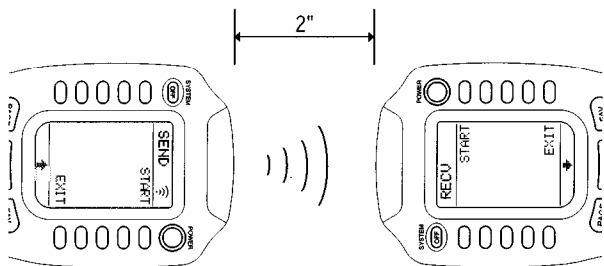
1. Go to the programming mode by pressing the **MAIN** and **ENTER** button simultaneously for three seconds.
2. Press the **CLONE** button in programming mode.



3. Press either the **SEND** or **RECV** button depending upon the role of the remote control. If the MX-500™ is to be copied from, press the **SEND** button. If it is to be copied into, press the **RECV** button.
4. If you wish to clone the entire device, press the **ALL** button. If you wish to clone only one device at a time, press the **DEVICE** button.

12. Cloning MX-500™

5. If you pressed the **DEVICE** button, it will show all the devices. Press the device button you wish to clone.
6. Set the MX-500™ head to head with another MX-500™ to be cloned from as shown below. The both units should be in either cloning from or cloning to mode based on the selection in Step 3.



7. Press the **START** button for the both units to execute. It will take about 40 seconds to complete the cloning and it will flash "GOOD" upon completion of cloning. If it flashes "FAIL", repeat from Step 2.
8. Exit from cloning mode by pressing the **MAIN** button and then exit from SET UP mode by pressing the **MAIN** button once again.

13. Adjustment of LCD Contrast

Pressing the **MAIN** and **UP** button of joystick simultaneously will make the LCD contrast darker and pressing **MAIN** and **DOWN** button of joystick simultaneously will make the LCD contrast lighter.

14. Caution on LCD Screen

Please note that the LCD screen is breakable glass. Please exercise the following precautions when using the MX-500™.

- Do not tap the LCD screen to activate devices. Use the rubberbutton.
- Keep the LCD screen dry. Wipe off any spills immediately. The MX-500™ is not waterproof and never immerse it in water.
- Don't expose the MX-500™ to extreme temperatures. Keep it away from heat source.
- Avoid dropping the remote control.
- Clean the LCD screen with a soft cloth. Never use abrasives or cleaning solutions.

15. Low Battery Message

If the batteries are running low, LCD displays "LOW BATTERY" each time you press the **POWER** button or you press the **MAIN** and **ENTER** buttons simultaneously.

16. Memory Lock.

The MX-500™ has an internal memory lock system that retains all the programs and learned functions for an extended period in the event of battery loss.

17. Warranty

The MX-500™ is covered against any manufacturer's defects or workmanship for a period of one year from the date of purchase. The warranty does not cover the following items:

- Batteries.
- Damage from misuse, neglect, or acts of nature.
- Products which have been modified or incorporated into other products.
- Products purchased more than 16 months from manufactured date.
- Units purchased in "AS IS" condition or units purchased as "Distressed Merchandise".

18. Specifications

Range : 40 ft ~ 60 ft, depending upon components.

Weight : 8 Oz (With batteries)

Size : 3.03" X 9.06" X 1.34" (H X W X D)

Batteries: Four AAA alkaline batteries.

19. APPENDIX

A. List of Preprogrammed LCD Text by Device

AUDIO	
TUNER	TV
CD	UCR1
DVD	UCR2
TAPE	SAT
AUX	UCR3
PAGE1	

AUDIO	
PHONO FM/AM	
TAPE2 SLEEP	
LDP	SURRO
DAT	P-LOG
CATV	TEST
PAGE2	

SAT	
FAUCH ACTIO	
ALPHA	REC
NEXT	SERVI
VIEW	BACK
ALT	HOP
PAGE1	

SAT	
FETCH	HELP
A	E
B	F
C	G
D	H
PAGE2	

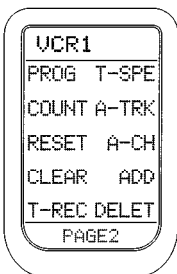
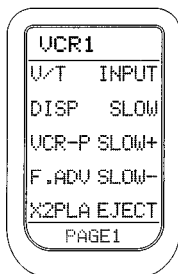
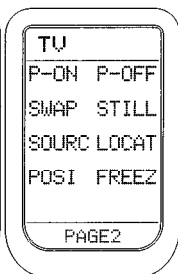
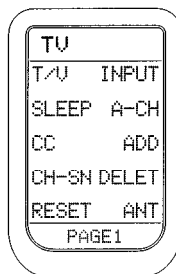
AUDIO

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	VOL UP
VOL DN	VOL DN
CH UP	PRESET+
CH DN	PRESET -
MUTE	MUTE
PRE-CH	SCAN
UP	UP
DN	DN
LEFT	LEFT
RIGHT	RIGHT
SELECT	SELECT
PLAY	REAR UP
STOP	REAR DN
REW	CENTER DN
FF	CENTER UP
I<<, MENU	MENU/Surr
>>I, GUIDE	GUIDE/Center
O, EXIT	EXIT/Delay
II, INFO	INFO
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	DISPLAY
ENTER	SHIFT

SAT

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	VOL UP
VOL DN	VOL DN
CH UP	CH UP
CH DN	CH DN
MUTE	MUTE
PRE-CH	PREV CH
UP	UP
DN	DN
LEFT	LEFT
RIGHT	RIGHT
SELECT	SELECT
PLAY	
STOP	
REW	
FF	
I<<, MENU	MENU
>>I, GUIDE	GUIDE
O, EXIT	EXIT
II, INFO	INFO
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	DISPLAY
ENTER	ENTER

19. APPENDIX



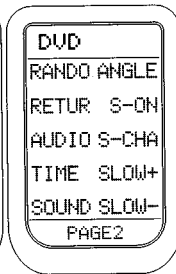
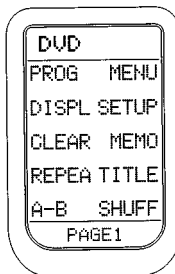
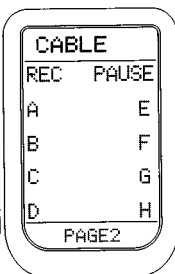
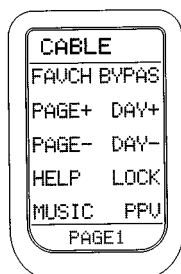
TV

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	VOL UP
VOL DN	VOL DN
CH UP	CH UP
CH DN	CH DN
MUTE	MUTE
PRE-CH	PREV CH
UP	UP
DN	DN
LEFT	LEFT
RIGHT	RIGHT
SELECT	SELECT
PLAY	
STOP	
REW	
FF	
I<<, MENU	MEMU
>>I, GUIDE	GUIDE
O, EXIT	CANCEL
II, INFO	INFO
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	DISPLAY
ENTER	ENTER

VCR

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	VOL UP
VOL DN	VOL DN
CH UP	CH UP
CH DN	CH DN
MUTE	MUTE
PRE-CH	PREV CH
UP	UP
DN	DN
LEFT	LEFT
RIGHT	RIGHT
SELECT	SELECT
PLAY	PLAY
STOP	STOP
REW	REW
FF	FF
I<<, MENU	I<<
>>I, GUIDE	>>I
O, EXIT	RECORD
II, INFO	PAUSE
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	DISPLAY
ENTER	ENTER

19. APPENDIX



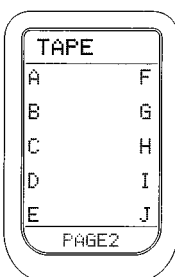
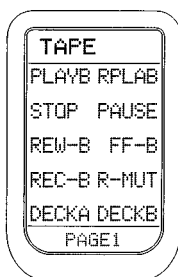
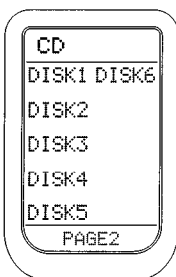
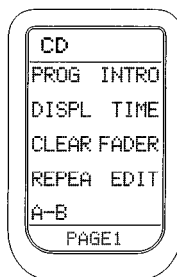
CABLE

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	VOL UP
VOL DN	VOL DN
CH UP	CH UP
CH DN	CH DN
MUTE	MUTE
PRE-CH	PREV CH
UP	UP
DN	DN
LEFT	LEFT
RIGHT	RIGHT
SELECT	SELECT
PLAY	PLAY
STOP	STOP
REW	REW
FF	FF
I<<, MENU	MENU
>>I, GUIDE	GUIDE
O, EXIT	EXIT
II, INFO	INFO
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	DISPLAY
ENTER	ENTER

DVD/LPD

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	
VOL DN	
CH UP	SKIP+
CH DN	SKIP -
MUTE	
PRE-CH	SEARCH
UP	UP
DN	DN
LEFT	LEFT
RIGHT	RIGHT
SELECT	SELECT
PLAY	PLAY
STOP	STOP
REW	REW
FF	FF
I<<, MENU	I<<
>>I, GUIDE	>>I
O, EXIT	EJECT
II, INFO	PAUSE
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	DISPLAY
ENTER	ENTER

19. APPENDIX



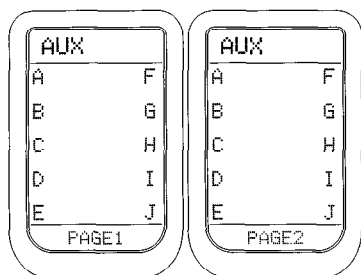
CD

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	
VOL DN	
CH UP	TRACK+
CH DN	TRACK -
MUTE	
PRE-CH	RANDOM
UP	
DN	
LEFT	SKIP -
RIGHT	SKIP +
SELECT	
PLAY	PLAY
STOP	STOP
REW	REW
FF	FF
I<<, MENU	I<<
>>I, GUIDE	>>I
O, EXIT	EJECT
II, INFO	PAUSE
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	
ENTER	DISC

TAPE

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	
VOL DN	
CH UP	
CH DN	
MUTE	
PRE-CH	
UP	
DN	
LEFT	
RIGHT	
SELECT	
PLAY	PLAY(A)
STOP	STOP(A)
REW	REW(A)
FF	FF(A)
I<<, MENU	R-PLAY(A)
>>I, GUIDE	Rec-MUTE(A)
O, EXIT	RECORD(A)
II, INFO	PAUSE(A)
1	
2	
3	
4	
5	
6	
7	
8	
9	
0	
DISPLAY	
ENTER	

19. APPENDIX



AUX

Button Name	Functions
System-OFF	OFF
POWER	ON/OFF
VOL UP	VOL UP
VOL DN	VOL DN
CH UP	CH UP
CH DN	CH DN
MUTE	MUTE
PRE-CH	PREV
UP	UP
DN	DN
LEFT	LEFT
RIGHT	RIGHT
SELECT	SELECT
PLAY	
STOP	
REW	
FF	
I<<, MENU	MENU
>>I, GUIDE	GUIDE
O, EXIT	EXIT
II, INFO	INFO
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
0	0
DISPLAY	DISPLAY
ENTER	ENTER

- Note : Because of the variety of function names for different components in this mode, we list them in A, B, C, D.....on the LCD. Please write the appropriate names that apply to your components.

Set-Up Code Table

B. Three-Digit Preprogrammed Code Table

AUDIO

Manufacturer/Brand	Set-Up Code Number
ADC	007
ADCOM	082 092 225 161 269
AIWA	018 104 170 202 203 213 211 188
AKAI	138 189
AMC	125 126 127 128 258 281 282
AMEND	054
AMX	196
ANGSTROM	142
ARCAM	141
AUDIO ACCESS	147
AUDIO ALCHEMY	135
AUDIO DESIGN	194 221 011
AUDIO EASE	021 196 207
AUDIO FILE	071
AUDIO MATRIX	167
AUDIO SOURCE	273
AUDIO TECHNICA	134
B & K	096 097
BOSE	070 170 224
BRYSTON	023
CARVER	006 028 061 071 201 214 226 180 185 022 029 077 284
CASIO	076
CHIRO	140
CINEMA SOUND	034 134
CITATION	148 272
CLARION	026
CURTIS MATHES	076
DENON	002 034 109 215 229 230 027 037 234 259
EIGER	149
ELAN	057
ENLIGHTENED AUDIO	099 098
FISHER	047 214 180 182
FOSGATE	062 231
GE	056 260
GOLDSTAR	008
HAFLER	174
HARMAN KARDON	231 233 254 153 154 118 121 227 277
HITACHI	020
INKEL	197
JBL	263
JCPENNY	076 216
JEFF ROWLAND	206
JENSEN	058
JVC	240 163 191 114 266 279
KENWOOD	026 066 145 146 181 190 197 192 182 199 151 222 180 005 280
KINERGETICS	220 140
KOSS	216
KRELL	150 072
KYOCERA	007
LEXICON	120 235 236 237
LINN	124
LUXMAN	137 139 052 165 115 004 009
LXI	076 056
MAGNAVOX	086 164 152 208
MARANTZ	006 028 031 040 063 185 186 251 265
MCINTOSH	238
MCS	076
MERIDIAN	100 012 013
MITSUBISHI	242 243 204
MONDIAL	157 158 042 043 081 112
MYRYAD	276
NAD	186 113 283

Set-Up Code Table

AUDIO

Manufacturer/Brand	Set-Up Code Number
NAKAMICHI	111 244 245 172 183
NEC	176
ONKYO	017 046 064 107 108 187 079 080 090 179 209 270 275
OPTIMUS	026 041 138
PANASONIC	032 195 219 177
PARASOUND	129 130 132 261
PHAST	196
PHILIPS	249 250 251 063
PIONEER	014 033 039 044 045 050 069 159 168 116 035 078 198
PROCEED	144 268
RCA	010 048 117 156 067
REALISTIC	019 056 073 075 095
REVOX	162
ROTEL	074 083 085
SAMSUNG	016
SANSUI	040 048 110 119 065 228
SANYO	047 059
SCOTT	019 091
SEARS	076
SHARP	026 094 131 175 181
SHERWOOD	024 038 055 102 103 105 106 051 030
SONY	018 093 223 247 248 160 166 015 101 184 218 271
SOUNDESIGN	036
SOUNDSTREAM	084 088
SSI	068
SUMO	171
TAEKWANG	138
TEAC	005 019 049 111 212 217
TECHNICS	122 176 193 219 178 177 200 257 262
THETA DIGITAL	136
TOSHIBA	060 087 198 278
WARDS	180
YAMAHA	026 253 169 067 173 205 264 232 089 264 274 285
ZENITH	143 210

Set-Up Code Table

SAT

Manufacturer/Brand	Set-Up Code Number
ALPHASTAR	123
AMPICA	050
BIRDVIEW	129 113 051 126
BSR	053
CAPETRONICS	053
CHANNEL MASTER	013 014 015 018 036 055
CHAPARRAL	008 009 012 077
CITOH	054
CURTIS MATHES	050
DRAKE	005 006 007 010 011 112 116 141 052
DX ANTENNA	024 046 056 076
ECHOSTAR	038 040 057 058 093 094 095 096 097 098 099 100 122
ELECTROHOME	089
EUROSAT	114
FUJITSU	017 021 022 027 133 134
GENERAL ELECTRIC	151 106 150
GENERAL INSTRUMENT	003 004 016 029 031 059 101 148
HITACHI	139 140
HOME CABLE	080 044 029
HOUSTON TRACKER	033 037 039 104 057 051
HUGHES	068 154
HYTEK	053
HYUNDAI	149
ICR	023
JANIEL	060 147
KATHREIN	108
LEGEND	057
LUTRON	132
LUXOR	144 062
MACOM	010 059 063 064 065
MEMOREX	057
NEXTWAVE	028 124 125
NORSAT	069 070
PACE	143
PANASONIC	142 060
PANSAT	121
PERSONAL CABLE	117
PHILIPS	071 152 153
PL	023 026
PRESIDENT	019 102
PRIMESTAR	110 030
PROSAT	072
PROSCAN	151 106 150
RCA	151 106 150
REALISTIC	043 074
SAMSUNG	123
SATELLITE SERVICE	028 035 047 085
SONY	103
STARCAST	041
SUPERGUIDE	020 124 125
TEECOM	023 026 075 087 088 090 107 130 137
TOSHIBA	002 127
TOWN & COUNTRY	023 026
UNIDEN	016 025 042 043 044 045 048 049 078 079 080 086 101 135 136
VIEWSTAR	115
WINEGARD	128 146
ZENITH	081 082 083 084 091 120

Set-Up Code Table

TV

Manufacturer/Brand	Set-Up Code Number
ADMIRAL	072 081 161 160
AKAI	197 146
AMARK	112 143
AMPRO	073 167 157 183
AMSTRAD	052
ANAM	043 054 056 080 112 131
AOC	197 004 112 058
AUDIOVOX	076
BLAUPUNKT	088
CAIRN	201
CANDLE	197 002 003 004
CAPEHART	058
CETRONIC	043
CITIZEN	197 002 003 004 043 101 103 143
CLASSIC	043
CONCERTO	004
CONTEC	043 050 051
CORONADO	143
CRAIG	043 054
CROWN	043 143
CURTIS MATHES	197 101 004 143
CXC	043
DAEWOO	004 016 043 044 076 103 114 125 127 143
DAYTRON	004 143
DWIN	177
DYNASTY	043
DYNATECH	062
EIKI	187
ELECTROHOME	024 076 143 196
EMERSON	197 004 005 028 043 047 048 050 051 076 096 143 151 153 154 155
FISHER	007 057
FUJITSU	198
FUNAI	028 043
FUTURETECH	043
GE	197 008 009 034 056 073 074 130 144 155 160 161 165 004 091 157 183
GOLDSTAR	004 102 106 112 113 116 119 127 143
HALL MARK	004
HITACHI	004 009 010 011 012 023 075 143 158 163 166 072
INFINITY	164
JBL	164
JCPENNY	197 004 008 009 024 030 065 101 143 156 160
JENSEN	013
JVC	034 038 070 083 145 199
KEC	043
KENWOOD	197 070
KLOSS	002 059
KMC	143
KTV	197 043 143 154
LODGENET	072
LOGIK	072
LUXMAN	004
LXI	166 007 015 052 081 160 164
MAGNAVOX	197 003 004 022 059 060 061 063 064 127 160 164 094
MARANTZ	197 164
MATSUI	164
MEMOREX	007 072 004
METZ	088
MGA	197 004 024 028 042
MINERVA	088
MITSUBISHI	004 024 028 040 042 109 124 146 191
MTC	197 004 062 101

Set-Up Code Table

TV

Manufacturer/Brand	Set-Up Code Number
NAD	015 025
NEC	132 130 134 197 040 016 024 056 019
NIKEI	043
ONKING	043
ONWA	043
OPTONICA	019 081
ORION	096
PANASONIC	034 056 080 092 164
PHILCO	197 003 024 056 059 060 063 064 164 004
PHILIPS	197 003 004 005 038 059 093 164 127
PIONEER	197 018 023 025 116 135 190 203 204
PORTLAND	004 143
PROSCAN	144 160 161 165 167
PROTON	004 058 131 143 171 173 193
QUASAR	034 056 092
RADIO SHACK	019 043 143 004 127
RCA	160 161 165 065 156 144 197 004 023 024 056 074 152
REALISTIC	007 019 043 047
ROCTEC	186
RUNCO	168 169 178 179 180 181 182 183 073 157
SAMPO	197 058 004 202
SAMSUNG	004 050 089 101 105 127 143 160
SANYO	166 007 020 053 057 082 187
SCOTT	004 028 043 048 143
SEARS	015 030 004 007 028 057 143 094 160 082 165 166
SELECO	189 200
SHARP	170 081 019 028 029 014 004 022 143 175
SIEMENS	088
SIGNATURE	072
SONY	070 085 139 147 126 185 194
SOUNDESIGN	004 028 003 043
SPECTRICON	112
SSS	004 043
SUPRE MACY	002
SYLVANIA	197 003 059 060 063 064 164 044 160 127
TANDY	081
TATUNG	056 062
TECHNICS	034 080
TECHWOOD	004
TEKNIKA	002 003 004 024 028 043 072 101 143
TELEFUNKEN	037 046 086 087
TELERENT	072
TERA	172
TMK	004
TOSHIBA	007 015 030 040 062 101 138
TOTEVISION	143
UNIVERSAL	008 009
VIDEO CONCEPTS	146
VIDIKRON	174 184 188 192
VIDTECH	004
WARDS	004 008 009 019 028 060 061 063 064 072 074 143 164 034
WESTING HOUSE	076
YAMAHA	197 004
YORK	004
YUPITERU	043
ZENITH	072 073 095 103 157 183
ZONDA	112

Set-Up Code Table

VCR

Manufacturer/Brand	Set-Up Code Number
AIWA	034 161
AKAI	016 043 046 124 125 142 146
AMPRO	072
ANAM	031
AUDIO DYNAMICS	012 023 039 043
BROOKSONIC	035 037 129
CANON	028 031
CAPEHART	108
CRAIG	003 040 135
CURTIS MATHES	031 041
DAEWOO	005 007 010 065 108 110 111 112 116 117 119
DAYTRON	108
DBX	012 023 039 043
DYNATECH	034 053
ELECTROHOME	059
EMERSON	006 017 025 027 029 031 034 035 036 037 046 101 129 131 138 153 162 116
FISHER	003 008 009 010
FUNAI	034
GE	031 063 072 107 109 144 147
GO VIDEO	132 136 155 040 115
GOLDSTAR	012 013 020 101 106 114 123
HARMAN KARDON	012 045
HITACHI	004 018 026 034 043 063 137 150 160 013
INSTANTREPLAY	031
JCL	031
JCPENNY	012 013 015 040 066 101
JENSEN	043
JVC	012 031 043 048 050 055 060 130 150 152
KENWOOD	014 048 034 047
LLOYD	034
LXI	003 009 017 034 106
MAGIN	040
MAGNAVOX	031 034 041 067 068 156 164
MARANTZ	012 031 067 069
MARTA	101
MATSUI	027 030
MEI	031
MEMOREX	003 010 014 031 034 053 072 101 102 134 139
MGA	045 046 059
MINOLTA	013 020
MITSUBISHI	013 020 045 046 051 059 061 142 151 049
MTC	034 040
MULTITECH	024 034
NEC	012 023 039 043 048
NORDMENDE	043
OPTONICA	053 054
ORION	025
PANASONIC	066 070 083 133 140 145 157 163 074
PENTAX	013 020 031 063
PHILCO	031 034 067
PHILIPS	031 034 054 067 071 101
PILOT	101
PIONEER	013 021 048
PORTLAND	108
PULSAR	072
QUARTZ	002 014
QUASAR	066 145 075
RADIO SHACK	123
RCA	013 020 041 107 109 140 144 145 147 034 040 158
REALISTIC	003 008 010 014 031 034 040 053 054 101
RICO	058

Set-Up Code Table

VCR

Manufacturer/Brand	Set-Up Code Number
RUNCO	148
SALORA	014
SAMSUNG	032 040 066 102 104 107 109 112 113 115 120 122 125
SANSUI	022 043 048 135
SANYO	003 007 010 014 134 102
SCOTT	017 037 112 129 131
SEARS	003 008 009 010 013 014 081 101 017 073 112
SHARP	031 054 149 159 165
SHINTOM	024
SIGNATURE	034
SONY	003 031 052 056 057 058 076 077 078 149 154
SOUNDESIGN	034
STS	013
SYLVANIA	031 034 059 067
SYMPHONIC	034
TANDY	010 034
TATUNG	039 043
TEAC	034 039 043
TECHNICS	031 070
TEKNIKA	019 031 034 101
THOMAS	034
TMK	006
TOSHIBA	008 013 042 047 059 079 082 112 131 081
TOTEVISION	040 101
UNITECH	040
VECTOR RESEARCH	012
VICTOR	048
VIDEO CONCEPTS	012 034 046 141
VIDEOSONIC	040
WARDS	003 013 017 024 031 034 040 053 054 131
YAMAHA	012 034 039 043
ZENITH	034 048 056 058 072 080 101

Set-Up Code Table

CABLE

Manufacturer/Brand	Set-Up Code Number
ABC	103 003 004 039 042 046 053
AMERICAST	099
ANTRONIX	014
ARCHER	005 007 014
BELL SOUTH	099
CENTURION	092
CENTURY	007
CITIZEN	007
COMBANO	080 081
COMSAT	074
COMTRONICS	030
DIGICABLE	101
EAGLE	020 030 040
EASTERN	057 066
ECHOSTAR	106
ELECTRICORD	032
GEMINI	008 054
GENERAL ELECTRIC	072
GENERAL INSTRUMENT	103 074 104
GNC	099
GOLDEN CHANNEL	030
HAMLIN	049 050 055
HITACHI	103 055
JERROLD	103 002 003 004 008 009 010 069 074
MAGNAVOX	010 012 064 079 095 094
MEDIA ONE	107
MEMOREX	052
MITSUBISHI	102
M-NET	037
MOVIE TIME	028 032
NOVAPLEX	092
NSC	015 028 038 071
OAK	031 037 053
PANASONIC	044 047
PARAGON	052
PHILIPS	006 012 013 020 085 095
PIONEER	103 034 051 063 076 105
PRUCER	059
PTS	011 071 074
PULSAR	052
RCA	047
RECOTON	098
REGAL	049 050
REGENCY	057
SAMSUNG	030
SCIENTIFIC ATLANTA	003 011 041 042 043 045 046
SIGNAL	030
SIGNATURE	103
SL MARX	030
SONY	096
SPRUCER	047 078
STARCOM	002 004 008 009
STARGATE	008 030 097 104
TADIRAN	030
TIME WARNER	043
TOCOM	039 040 056
TOSHIBA	052
UNIKA	007 014
UNITED CABLE	004 053
UNIVERSAL	005 007 014 032 035
VIEWSTAR	012 015 018 086 087 088 089
ZENITH	052 060 093 100

Set-Up Code Table

DVD

Manufacturer/Brand	Set-Up Code Number
APEX DIGITAL	087
DENON	007 080
GE	026 027
HARMAN KARDON	084
JVC	012
LG	091 057 074
MAGNAVOX	066
MARANTZ	083
MITSUBISHI	017
NAD	088
ONKYO	076 035
PANASONIC	021 042
PHILIPS	066
PIONEER	023 092 107 108
PROCEED	086
PROSCAN	026 027
RCA	026 027
SAMSUNG	056 070
SHARP	094
SONY	033
THETA DIGITAL	032
THOMPSON	026 027
TOSHIBA	035 034
YAMAHA	042 089
ZENITH	057 074 091

Set-Up Code Table

CD

Manufacturer/Brand	Set-Up Code Number
ADCOM	062 042
AIWA	059 065 088 089 105 122 170 187
AKAI	085 195 202
AMC	231 232
AMEND	118
ARCAM	238
AUDIO ACCESS	119 147
AUDIO EASE	165
AUDIO TECHNICA	046
BSR	037 057
CALIFORNIA AUDIO	103 008
CAPETRONIC	063
CARRERA	057 080
CARVER	185 041 044 050 086 107 130 134 135 138 139 203 204 167
CASIO	111 182
CLARINETTE	182
CREEK	159
CROWN	035
DENON	002 123
EMERSON	042 069 102
FISHER	050 185 134 008
FRABA	111
GENEXXA	010 069 102
GOLDSTAR	080
HAITAI	093
HARMAN KARDON	018 033 047 208
HITACHI	042 175
INKEL	130 143 144
JC PENNY	014 061 092 141
JENSEN	158
JVC	004 022 136 163 213 214 242 243
KENWOOD	185 007 023 055 071 072 142 137
KOSS	061
KRELL	241
KYOCERA	005
LOTTE	102
LUXMAN	011 028 070 076
LXI	059
MAGNAVOX	044 107
MARANTZ	027 041 044 051 077 107 209
MCINTOSH	212
MCS	014 073 092
MEMOREX	010
MISSION	044 107
MITSUBISHI	179
MITSUMI	153
MODULAIRE	182
MONDIAL	147
MYRYAD	244
NAD	006 005 067 178
NAKAMICHI	217 218 219 095
NEC	014 062
NIKKO	046
NSM	044 107
ONKYO	030 038 039 168 169
OPTIMUS	010 050 057 058 081 082 083 085 093 195
PANASONIC	103 201 172 008 068
PARASOUND	233
PHILIPS	041 044
PIONEER	010 020 025 056 174 175 176
PROCEED	239
PROTON	044 107 228